rent of the river after striking the Washington shore at Three Tree Point, is to be deflected by Jim Crow Point and pass down through the Woody Island Channel; but as stated, the construction of the jetty from Snag Island, backed the water up against the north shore and caused it to make a new channel. (Record, p. 108.) Mr. Jussen testified (Record, p. 176) that the "jetty had the effect of splitting or dividing the waters of the Columbia River, and throwing a large portion towards the north shore which would otherwise pass into the Woody Island channel." The natural course of the river, as testified to, would practically be as indicated by the line in red marked on this exhibit as "1859 channel," passing down and through Woody Island channel to a point north of Tongue Point. (Record, p. 167.) And so existed without dredging. (Record, p. 177.) In addition to the building of this jetty, the government has annually, for many years, caused considerable dredging to be done between Pillar Rock and the mainland which has likewise contributed to the change in the course of the channel, and has had the effect of maintaining a ship channel north of the rock. (Record, pp 118,195.) Mr. Hegardt stated as follows: Record, p. 194.)

The dredging done at Pillar Rock was done for the purpose of increasing the depth of water and increasing the volume of water passing through it, with the view of creating a strong or scouring current, thereby receiving the aid of the natural forces in keeping this channel open.

In a report made by Major Hanbury of the corps of engineers of the United States Army on December 8, 1891, in discussing the various channels which we have just referred to, he states:

Following the present ship channel from Jim Crow Point down it inclines south to round the shoal water in the vicinity of Pillar Rock, thence back to the Washington shore, which it follows to the crossing, thence over to Tongue Point. The ruling depth here is practically 20 feet at mean low tide. The average rise of tide is 7 feet.

This channel has the great disadvantage of making a crossing in a wide place in the river bed where the sands are continually working down and changing its direction and capacity. Works erected with the view to holding it in any one position would at times have to contend against the natural inclination of the river, and would therefore be expensive and uncertain in their results. It would be

practicable to force this water to continue down the north shore, and improve the depth of water on that side, should the necessities of commerce warrant the expense. At present the problem is to obtain the depth of 25 feet to the sea by the most practical and economical route, and with the least disturbance of the present existing conditions. Taking the channels in this locality in their different positions as we now find them, and considering the present tendencies of their several courses, together with other facts and interests bearing upon the problem, it would seem best to restore and maintain the one passing to the south of Snag Island. If the water that is diverted by Jim Crow Point into the head of this channel can be continued down and kept from spilling out as it were over the adjacent shoals, and these shoals are encouraged to build up, the desired object will undoubtedly be attained. Mention has before been made of the fact that a large portion of this water is lost at Snag Island, where it escapes to the northward.

The State of Washington was fortunate in securing Captain Cleveland Rockwell as a witness. For some 25 years and up until 1892 Captain Rockwell was an officer of the United States Coast and Geodetic Survey, engaged on the section of the river now under discussion in topographical work, which is the delineation of the shores and the land. He was also engaged in triangulation and hydrography on the same portion of the river. (Record, pp. 206-7.) Captain Rockwell verifies the accuracy of the channel line shown on Exhibit I and he states that the Woody Island Channel was used up until the survey by Cordell in 1867, at which time the Cordell Channel was afterwards used. The captain was also of the opinion that the building of the dyke from Snag Island across the Cordell Channel had the effect of increasing the flow of the water through the Pillar Rock Channel (Record, p. 211), and that the natural flow of the river from Jim Crow Point would be down the Woody Island Channel. (Record, p. 211.)

It is also shown by the evidence that the portion of the 1905 channel line between Yellow Bluffs and Tongue Point, is maintained by continuous dredging on the part of the government (Record, p. ....), and we may safely assume that this channel would not otherwise exist.

We believe therefore that the true boundary line upon that section of the river shown on Exhibit I should be the line marked "1859

channel line" because, as we contend, that is and would be the natural course of the river had it not been for the artificial aids placed in the river by the government for the purpose of changing such channel.

Mr. Ross, commissioner of public lands of the State of Washington, who had jurisdiction of all the land interests of the state, including tide lands and oyster lands, whether attached to the main land or detached, was called as a witness in behalf of the complainant. A map was introduced in evidence (marked Exhibit K) which shows such sands and portions of Sand Island, detached tide lands, etc., as the state has sold or contracted to sell to private individuals. The map does not pretend to show the entire body of land that might be sold or occupied but merely such portions thereof as the state has sold. As said by Mr. Ross the state claims all of Sand Island and in fact all of the sands and islands, all of the lands north of the line marked "boundary" line which is attached to the bill of complaint. (Record, pp. 126, 127, 185-190.)

Mr. Kershaw, who from March, 1902, until April, 1906, was fish commissioner of the State of Washington, stated that licenses had been issued by him to fishermen on practically all of the sands and islands north of the boundary line as claimed by the complainant. (Record, p. 142.) It appears that during the year 1905 a conference was had by the fish commissioners of the two states, and in view of the fact that a large number of fishermen were taking out licenses from both states, a tentative arrangement (not sanctioned, however, by any legislative or executive authority of either state) was entered into. Thereunder an agreement was made by which the fishermen were not required to take out licenses from each state, but a sort of division was agreed upon by the fish commissioners, pending the settlement of this present litigation. At the time of such agreement this suit was in course of preparation, and previous thereto, the Washington Legislature appropriated money for its prosecution. (Record, pp. 143-144.)

For the foregoing reasons, we pray that the boundary line between the states of Washington and Oregon be declared to be the

line marked "1905 channel line" in that section of the river shown on Exhibit H; and the line marked "1859 channel line" in that section of the river shown on Exhibit I.

Respectfully submitted,

JOHN D. ATKINSON,
Attorney General,

E. C. MACDONALD,
Assistant Attorney General,

SAMUEL H. PILES,
Solicitors for Complainant.

IN THE

Supreme Court of the United States

OCTOBER TERM, 1907

No. 6, Original.

STATE OF WASHINGTON,	COMPLAINANT,	*In Equity.*
v.		
STATE OF OREGON,	DEFENDANT.	

BRIEF ON BEHALF OF THE STATE OF OREGON, DEFENDANT, ON FINAL HEARING.

HARRISON ALLEN,
C. W. FULTON,
A. M. SMITH,
Of Counsel.

A. M. CRAWFORD,
ATTORNEY-GENERAL
I. H. VAN WINKLE,
ASSIST. ATT'Y-GENERAL
Solicitors for State of Oregon.

SALEM, OREGON
WILLIS S. DUNIWAY, STATE PRINTER
1907

STATEMENT OF THE CASE.

This is an original suit brought by the State of Washington, complainant, against the State of Oregon, defendant, to determine whether the defendant has unlawfully claimed jurisdiction over certain so-called islands and sands in the Columbia River, the same being located between the mouth of said river and Three Tree Point, a point on the northern shore thereof, about twenty-nine miles up stream from the mouth.

We think it will be admitted that all of the so-called islands and sands are regularly overflowed by ordinary tides, except Sand Island, located at the mouth of the river. The main allegation of the bill of complaint relative thereto is set forth on page 3 of the printed record and reads as follows:

> "That a controversy has arisen and exists between your oratrix and defendant regarding the boundary line between said States, and your oratrix complains that the defendant has unlawfully claimed and exercised jurisdiction over numerous islands and sands in said Columbia River, among others being Desdemona Sands, Sand Island, Kersage Sands, Ryan Sands, Miller's Sands, Reed Sands, Enyert's Sands, Oliver Sands, Kaboth Sands, Walker's Island, Johnson's Sands, Bauman's Sands, Helgerson's Sands, Henry's Sands, Colwell's Sands, Taylor's Sands and other islands and sands in the said river, the exact number and description of which your oratrix has not sufficient knowledge upon which to form a belief; but that all of said islands and sands are in truth and in fact within the territorial limits and jurisdiction of your oratrix, and north of the boundary line between said States as shown upon the exhibits hereto attached."

The State of Oregon, while it admits having claimed and exercised jurisdiction and sovereignty over the same, denies that it has done so unlawfully and that any of them are north of the boundary line between the two sands are within the territorial limits and jurisdiction of the complainant, and alleges that all of said islands and sands are within the territorial limts and jurisdiction of the State of Oregon, and have been therein ever since Oregon was admitted into the Union of States.

The foregoing briefly sets forth the whole matter in controversy in this suit.

The islands or sands in controversy are chiefly valuable as seining grounds for salmon fishing and as such yield a large revenue to the State within whose jurisdiction they may lie.

It may be of aid in determining the matter to refer to the several acts of Congress, and the States, parties hereto, leading up to and establishing the boundary involved in the controversy, in their chronological order.

CHRONOLOGICAL STATEMENT.

First. August 14, 1848, "An act to establish the territorial government of Oregon," comprising "all that part of the territory of the United States which lies west of the summit of the Rocky Mountains, north of the 42 degree of north latitude, known as the Territory of Oregon." 9 U. S. Stat., 323.

Second. March 2, 1853, "An act to establish the territorial government of Washington," comprising, "all that portion of Oregon Territory, lying and being south of the 49 degree of north latitude and north of the middle of the main channel of the Columbia River, from its

Boundaries of Oregon fixed in article sixteen
nstitution, which was formed in 1857, (August a
and incorporated in the enabling act of Congres

mouth to where the 46 degree of north latitude crosses said river, near Fort Walla Walla, thence with said 46 degree of latitude to the summit of the Rocky Mountains." 10 U. S. Stat., 172.

Third. February 14, 1859, "An act for the admission of Oregon into the Union," establishing the northern boundary as beginning at a point one marine league due west and opposite the middle of the north ship channel of the Columbia River; thence easterly, to and up the middle channel of said river, and, where it is divided by islands, up the middle of the widest channel thereof to a point near Fort Walla Walla, etc. 11 U. S. Stat., 383.

Fourth. October 21, 1864, Act of Oregon Legislature ceding to the United States Sand Island and other tide lands in the Columbia River.

Fifth. April, 1885, construction of jetty at mouth of Columbia River commenced by United States. House Documents, Vol. 58, 56th Cong. 1st Session, serial number 3955, Doc. 94, p. 5.

Sixth. February 22, 1889, Act of Congress authorizing the admission of Washington (and other States) into the Union. 25 U. S. Statutes, page 676.

The Washington constitution was ratified by the people of that State at an election held on October 1, 1889.

Seventh. November 11, 1889. The President of the United States, in accordance with the provisions of section 8 of the enabling act, proclaimed the admission of said State of Washington into the Union. Article XXIV of said

constitution, so ratified, defined the southern boundary of said State as far as the same is material in this controversy, as follows:

"Beginning at a point in the Pacific Ocean one marine league due west of and opposite the middle of the mouth of the north ship channel of the Columbia River, thence running easterly to and up the middle channel of said river and where it is divided by islands up the middle of the widest channel thereof to where the forty-sixth parallel of north latitude crosses said river, near the mouth of the Walla Walla River."

To determine even approximately the location of the boundary line between the complainant and defendant, it is necessary to fix the beginning point of the same at the west end thereof.

POINT OF BEGINNING OF WEST END OF BOUNDARY BETWEEN THE TWO STATES.

When Oregon was admitted in 1859 its western and northern boundaries were defined as follows:

"Beginning one marine league at sea, due west from the point where the forty-second parallel of north latitude intersects the same; thence northerly, at the same distance from the line of the coast, lying west and opposite the State, including all islands within the jurisdiction of the United States, to a point due west and opposite the middle of the north ship channel of the Columbia River; thence easterly, to and up the middle channel of said river, and, where it is divided by islands, up the middle of the widest channel thereof, to a point near Fort Walla Walla," etc.

The northern boundary commenced, as above defined, "One marine league due west and opposite the middle of the north ship channel of the Columbia River." When Washington was admitted, in 1889, its southern boundary, the same being the boundary between the two States, and therefore the northern boundary of Oregon, was defined and established, and the point locating the western end thereof definitely fixed as follows:

> "Beginning at a point in the Pacific Ocean, one marine league due west of and opposite the middle of the mouth of the north ship channel of the Columbia River."

This was the first time the word "mouth" was ever used in fixing the beginning of said line, and there is no doubt that Congress and the Washington constitutional convention in drafting its constitution used the word "mouth" to definitely fix and locate the said point, and since said date both States have recognized the line as being correctly defined in said instruments, and not in conflict with the description as defined in the Oregon Constitution and the act of Congress admitting the State —the only difference being the use of the word "mouth" in the Washington act. The Oregon act had always, up to that time, been construed by the authorities of the two States as meaning opposite the "mouth" of the north ship channel, where the Columbia River flows into the Pacific Ocean. No other construction could be given the language used, when we glance at the maps of that date, as the said channel is long and crooked, and if a point in the middle of the mouth thereof was not intended, then the point could be placed anywhere within a limit of several miles, and comply with the terms of the act. Such a conclusion appears absurd and no such intention can be charged to Congress when a reasonable view of all the conditions will harmonize the acts and render the legislation sensible.

MOUTH OF NORTH SHIP CHANNEL.

It is, of course, necessary to determine the "mouth of the north ship channel" before we can fix the center of the same, and we assume that the mouth of the north ship channel is on the same line or at the same place as the mouth of the Columbia River, or of that part of the river in which the said north ship channel is located, and that suggests the question, where is the mouth of the Columbia River?

A river is defined in Gould on Waters (2d Ed.), section 41, to be a running stream of water, pent in on either side by banks, shores, or walls. Every river consists of (1) the bed, (2) the water, (3) the banks or shores, and it also has a current. Therefore, the mouth of the river is the place at which its waters cease to be confined within its banks, shores, or walls and empties into the sea or larger body of water. Said section reads in part as follows:

> "A river is a running stream of water pent in on either side by banks, shores, or walls; and it bears that name as well where the waters flow and reflow with the tide as where the current is always in one direction. Every river consists of: (1) the bed; (2) the water; (3) the banks or shores; and it also has a current. It is a river or watercourse from the point where the water comes to the surface and begins to flow in a channel until it mingles with the sea, the arms of the sea, lakes, etc. It may sometimes be dry, but in order to be within the above definition it must appear that the water usually flows in a particular direction, and has a regular channel, with bed, banks, or sides."

We also call attention to the numerous authorities cited in said section.

In 2 Farnham on Waters and Water Rights, page 1462, we find the following:

> "A river is composed of bed, banks, and stream, and is to be distinguished from a lake by the fact that it is characterized by confining channel banks which give it a substantial single course throughout, while a lake occupies a basin of greater or less depth and may or may not have a single prevailing direction. The fact that the lake has a current will not destroy its character as lake if its other characteristics make it such. The bed of a river is a definite and commonly a permanent channel and consists of the soil which is permanently submerged by the water. The banks of the stream are the elevations of land which confine the waters to their natural channel when they rise to the highest point at which they are still confined to a definite course and channel. The channel is the passageway between the banks through which the water of the stream flows. Ship channel, in a grant of lands between high tide and ship channel, is the line of low tide, where no artificial boundary has been established by competent authority. A description to or down the channel of a stream refers to the thread or central line of the channel. The mouth of a stream emptying into a tidal river is where it flows into it when the tide permits it to flow and is the same at high water as at low water. In a statute which requires measurement from the coast, the coast is the point of contact of the main land with the main sea; and when a bay intervenes the point of contact of the bay with the main land is to be considered as the coast."

The court holds in Ball *v.* Slack, 2 Whart. (Pa.) 508, 538; 30 Am. Dec. 278, that the mouth of a creek emptying into a tide-water stream is the point at which it discharges its waters into the stream, and not the point at which its current is stopped by tide-water, and is the same at high as at low water.

If the foregoing is admitted to correctly define what constitutes a river and the mouth thereof, then the mouth of the Columbia River in 1859, when Oregon was admitted into the Union of States, and in 1889, when Washington was admitted into the Union of States, was and still is where the waters of the Columbia River cross a line joining the nearest points on Cape Disappointment and Point Adams, respectively, the same being the most western points on each shore nearest to each other. Such appears to have been heretofore considered the "mouth of the river."

Oregon Exhibit 6, being chart No. 1 of entrance to Upper Astoria, published at Washington, D. C., March, 1905, date of first publication, 1868, defines the line dividing the high seas from inland waters of the Columbia River relating to rules of the road as follows: "From Cape Disappointment light to Point Adams old tower." This appears to be the rule or line adopted then by the United States Coast and Geodetic Survey as the place or point where the Columbia River ceases and the ocean begins, and it is but very little, if any, west of the line above described, contended for by the defendant, and would not materially change the beginning of the boundary line between the two States as contended for by defendant.

Again we find in the "Report of the Board of Engineers for the permanent improvement of the mouth of the Columbia River, Oregon," of date October 13, 1882, set forth on page 19 of the transcript of record, in this cause, the following language: "The Columbia River enters the Pacific Ocean between Cape Disappointment (Hancock) and Point Adams."

Mr. *John H. Lewis*, State Engineer for Oregon, is in harmony with the above board of engineers. He says in his testimony in this cause, transcript of record, page 380:

"Q. What do you consider to be the mouth of the river?

"A. It is a line drawn between a point on Cape Disappointment and Point Adams which are nearest to each other, respectively.

"Q. Do you consider as a general rule that the mouth of a river is shown by a line drawn connecting the headlands nearest to the sea?

"A. I have taken this to be the mouth of the Columbia River for the reason that beyond these points the land recedes in every direction, and except for the technical description as shown near the top of Washington's Exhibit H, which I assumed was placed there merely to fix this line more definitely for mariners, perhaps without regard to the exact definition of the word."

"Q. Mr. Lewis, I would like to get a direct answer to my question."

The question was read by the reporter.

"A. Connecting some points on the headlands nearest the sea, yes sir.

"Q. Would it, then, make no difference in your determination of what the mouth of the river was, whether there were islands out here, or sands, or the fact that there were well-defined channels westwardly and seaward from this line joining these two points?

"A. These islands would be in the ocean.

"Q. And these sands would be in the ocean?

"A. Yes sir.

"Q. You are familiar with the improvements which have been made by the federal government out there?

"A. I have heard something of them and see—

"Q. Then, according to your definition of the mouth of the river, all these improvements are out in the Pacific Ocean and not in the Columbia River.

"A. A part of them would be.

"Q. Part of them are in the Pacific Ocean?"

"A. Yes sir."

We respectfully contend that the channel of the Columbia River must stop where the river stops and the ocean begins. To hold otherwise would result in endless confusion and misunderstanding. And the fact that the Navy Department and U. S. engineers have for many years so treated it seems to us should be considered conclusive and not leave the matter open to debate.

Assuming the foregoing premises to be correct, the beginning of the boundary line would be at the time Washington was admitted into the Union of States (1889) one marine league due west from the point in the middle of the mouth of the north ship channel of the Columbia River, where its waters break over a line drawn from a point on Cape Disappointment to a point on Point Adams, nearest to each other, on the most western and southern point of Cape Disappointment, and the most western and northern point of Point Adams, and is correctly indicated upon the map attached to defendant's answer to the bill of complaint.

If Congress had intended said point to be a shifting point, depending on the scouring out or filling in of channels in the ocean, the intention would certainly have been at least hinted at in some of the numerous acts relating thereto, but we are unable to find any such intimation in any of them, and the reasons are strong why a definite starting point was intended to be fixed.

If the beginning of the line was permitted to be shifted by the changeable currents of the river, and the action

of the winds and waves upon the same, and their effect upon the shifting sands, it might vary from one to five miles, as the mouth of the river is about six miles wide, and thus render the rest of the description of the line inapplicable. For instance, at times the evidence shows the waters of the north ship channel of the Columbia River are discernible for many miles at sea and a long distance south of Point Adams, and if, as we understand plaintiff's position, that should be considered the mouth of the channel and the beginning of the boundary line, it would be south of the city of Astoria, Oregon. While the line may be subject to the rule of accretions and be shifted from side to side of the river by the action of winds and floods, the beginning must be permanent, or if it changes at all, it must change along the line marking the mouth of the river.

If Congress intended "the middle of the mouth of the north ship channel of the Columbia River" to be construed, as contended for by plaintiff, as the middle of the mouth of such Columbia River channel extended westerly into the Pacific Ocean, language would have been used to indicate such intention.

After the starting point is located we run one marine league due east to the middle of the north ship channel of the Columbia River; thence easterly to and up the middle channel. While the language of the act does not expressly state that the line should run easterly up the middle of the north ship channel to the middle channel, such is evidently the meaning to be drawn from the act and the condition of said channel at the date of the various acts, defining the line to which reference is hereinbefore made.

NORTH SHIP CHANNEL.

It can hardly be disputed that at the time of the admission into the Union of each of the States, parties to

this suit, the north ship channel of the Columbia River was north of the sands known as Sand Island.

Referring to Oregon's Exhibit No. 4 (Plate III herein), being the chart of 1851, and Oregon's exhibit No. 5, being chart of 1854, U. S. Coast Survey, which charts contain the latest hydrography prior to the admission of Oregon, and must have been the maps and charts examined by Congress and the respective committees, in all proceedings relative to the admission of said State, we find shown thereon two well-defined ship channels at the mouth of the Columbia River, one north of Sand Island and at that early day principally used by sea-going vessels.

Again referring to Oregon's Exhibit No. 9, being chart No. 1 of the Columbia River, 1870, hydrography 1868, we find the same conditions shown thereon. This continued practically the same until after the admission of the State of Washington in 1889. It is true that changes had begun prior to that time, caused principally by the commencement of the jetty on the southern shore at Point Adams in 1885, the tendency being to wash away said island on the south and add to it on the north, thus shoaling and narrowing the north channel, and forcing the boundary line nearer to the Washington shore. From an examination of all the charts of that date Oregon's Exhibit No. 9, chart No. 1, 1870, shows the latest hydrography prior to the admission of the State of Washington, and if so must have been the chart consulted by the authorities of the proposed state and Congress upon its admission, and must be conclusive of the proposition that there was at that date, shown upon the charts examined, a good north ship channel, north of Sand Island, and that it was the channel referred to when said boundary was established in 1889. If the above is correct, and it appears to be established from the charts of that date, and we recollect no evidence in the record to the contrary, it cannot be disputed that Sand Island was in the jurisdiction of Oregon when Washington was admitted into the

ion in 1889, and was so considered by all interested
rties, and the boundary line between the two States
rth of said island.

This position is strengthened by the fact that in 1864,
pursuance of a request of the Federal Government so
do, the State of Oregon duly ceded, by legislative action,
risdiction over the said island to the United States, and
e United States Government took immediate possession
ereof, and has always since said date continued to hold
d exercise jurisdiction over the same by virtue of said
.

Having entered the middle of the mouth of the north
p channel, the line remains therein until the north
p channel connects with the middle channel. The act
Congress admitting the State of Oregon into the Union,
er having arrived at the middle of the north ship
annel, reads: "Thence easterly, to and up the middle
annel of said river, and where it is divided by islands,
the middle of the widest channel thereof," etc.

An examination of Oregon's Exhibit 4 (Plate III here-
), the same being chart of the mouth of Columbia
ver, published in 1851, which is reproduced in the
ief, shows the north ship channel runs almost due east
er passing Sand Island, to Point Ellice, and then fol-
vs the Washington shore northeasterly to Point Gray,
ving a ruling depth of three and one-half fathoms.
id exhibit also shows the north ship channel uniting
th the middle channel a little southeast of Point Ellice,
hich point is really the commencement of the middle
annel, with a ruling depth of three and three-fourths
thoms, and the south or Clatsop channel extending along
e Oregon shore to Tongue Point. The same condition
the channels is also shown on Washington's Exhibit H.
ch exhibit shows that in 1851, and 1854, there was no
ddle channel until Point Ellice was reached, and the
arts of 1851 and 1854 must have been the charts ex-
hined by Congress and other interested parties at the

date of the act admitting Oregon into the Union. This is all the evidence there is as to a middle channel at that date. Captains and pilots knew of none nearer the mouth of the river and the charts of that date fail to disclose any other middle channel, and this being so plainly distinguishable from the two exhibits above mentioned, and they being the charts published latest prior to the admission of Oregon, is strong evidence that the middle channel commenced just east of Point Ellice.

Also, when we consider the short distance from Point Ellice to the mouth of the river with the hydrography of that portion, as shown by the charts of that date, and that it is nearly fifty years since Oregon was admitted as a State, and that the oldest pilots testify that they knew of no middle channel near the mouth of the river, the conclusion is irresistible that Congress had in mind the middle channel, commencing near Point Ellice. This is also in harmony with the language of the boundary legislation between the two States, to-wit: "Commencing one marine league due west and opposite the middle of the mouth of the north ship channel, thence easterly to and up the middle channel."

After entering the middle channel a little east of Point Ellice, the same continues to south of Point Gray at a ruling depth of three and three-fourths fathoms, as shown by Oregon's Exhibit 4, and thence, as shown by Exhibit 1 attached to Oregon's answer, and Washington's Exhibit L, up the river joining the Tongue Point channel; south of Yellow Bluffs, with a ruling depth through this portion of three and three-fourths fathoms, except a shoal south of Portuguese Point where the lowest depth is eleven feet at low water. That all measurements are at lowest low water, is shown by the testimony of the engineers for both States. The north channel ends in Baker's Bay and the middle channel continues along the Washington shore to Three Tree Point, the end of this controversy. There is no dispute that, since the earliest knowledge of the

river, a good ship channel has existed where Oregon claims the line between Yellow Bluffs and Three Tree Point. The position that at the date of the admission of Oregon, the middle channel referred to in the act is the channel commencing near Point Ellice, a little east, is strengthened by the fact that, at that date, 1859, sheet No. 2, Columbia River, being Washington's Exhibit L, had not been published, its first publication being in 1875, and the hydrography of the years 1867 and 1868, by E. Cordell, while Oregon's Exhibit No. 4 (Plate III herein), was published in 1851, and must have been the map consulted.

Oregon's Exhibit No. 4, map of 1851 (Plate III), published herewith, shows a well-defined middle channel easterly from Point Ellice and terminating at the edge of the map about three-fourths of a mile south of Point Gray, which channel at this point is nearly one-eighth of a mile wide. From the testimony, it appears that there is no map in existence showing the hydrography of the same date extending up the river from Point Gray.

In the testimony of Mr. *John H. Lewis*, State Engineer for Oregon, in reply to a question pertaining to this middle channel, transcript of record, page 279, he states:

"Q. Now, then, assuming that a vessel did pursue that north channel and got up as far as Point Ellice, could it get up the river to Portland at that time?

"A. I assume at that time that a ship going as far as Point Ellice could have continued on up the river, for the reason that any channel, in order to keep itself open, must receive water through some other connecting channel. Therefore, there must have been a connecting channel beyond the terminus of this map."

Oregon's Exhibit No. 7 shows the hydrography of the Columbia River of 1867-68, which is the first map showing hydrography published after that of 1851, Oregon's

Exhibit No. 4 (Plate III), for that portion of the river. Mr. Lewis further testifies with reference to this middle channel, page 279, transcript of record, as follows:

"Q. Does the map show that this middle channel is of sufficient depth to admit of ocean-going vessels? I mean the channel shown on Oregon's Exhbit No. 7.

"A. At the point where I assume the channel as shown on Oregon's Exhbit No. 4 (Plate III) would connect, it appears that there is three and one-fourth fathoms of water, which is sufficient to float an ocean-going vessel of considerable draft; and from there easterly for a considerable distance I notice a continuation of this channel. But for a short distance southwesterly from what is marked on Oregon's Exhibit No. 7 as Yellow Bluffs I notice at the present time, without dredging, a ship of only eleven feet draft could pass over the bar." (See Pate III.)

Senator Fulton: "That is, at low tide?"

Witness: "At low tide."

"Q. That is, that condition obtained in 1875?

"A. 1867-68.

"Q. I mean 1867 and 1868.

"A. Yes sir.

"Q. And that map from which you have testified I understand you to say is the nearest publication showing that portion of the river after the admission of Oregon into the Union?

"A. It is the nearest that I know of."

It is testified to in the record at various times that the average tide in this portion of the river is about seven feet. Therefore, at high tide, an ocean-going or other vessel drawing eighteen feet of water could pass through what is shown as the middle channel of Oregon's Exhibit

No. 4 (Plate III herein) and continue to and pass Yellow Bluffs as shown on Oregon's Exhibit No. 7.

There is no oral testimony in the record extending back to that date which in any way contradicts the maps, and the hydrography made by the U. S. Coast Surveying parties is doubtless more reliable than would be the memory of man, of conditions existing fifty years ago, especially where the conditions relate to the channels of a large river six miles wide, and whose navigation followed the lines established by the U. S. Coast Survey.

Assuming the foregoing to be correct as to the line as established by the act admitting Oregon into the Union, it follows that it must remain the same, unless it has been changed by consent of the State of Oregon, or under the doctrine of accretion as defined by this court.

It was held in the case of Indiana *v.* Kentucky, 136 U. S. 479, in substance, that after the boundaries of a State are established by act of Congress and the State admitted as a member of the Union of States, such boundary cannot be changed without the consent of such State, except by accretion as before stated. The decision of the court is stated in the syllabus as follows:

> "The waters of the Ohio River, when Kentucky became a State, flowed in a channel north of the tract known as Green River Island, and the jurisdiction of Kentucky at that time extended, and ever since has extended, to what was then low-water mark on the north side of that channel, and the boundary between Kentucky and Indiana must run on that line, as nearly as it can now be ascertained, after the channel has been filled.
>
> "The dominion and jurisdiction of a State, bounded by a river, continue as they existed at the time when it was admitted into the Union, unaffected by the action of the forces of nature upon the course of the river."

Also in the case of Missouri *v.* Kentucky, 11 Wallace (U. S.), Mr. Justice Davis, delivering the opinion of the court, used the following language, page 401:

> "It is unnecessary, for the purposes of this suit, to consider whether, on general principles, the middle of the channel of a navigable river which divides coterminous States, is not the true boundary between them, in the absence of express agreement to the contrary, because the treaty between France, Spain, and England, in February, 1763, stipulated that the middle of the River Mississippi should be the boundary between the British and the French territories on the continent of North America. And this line, established by the only sovereign powers at the time interested in the subject, has remained ever since as they settled it. It was recognized by the treaty of peace with Great Britain of 1783, and by different treaties since then, the last of which resulted in the acquisition of the territory of Louisiana (embracing the country west of the Mississippi) by the United States in 1803. The boundaries of Missouri, when she was admitted into the Union as a State, in 1820, were fixed on this basis, as were those of Arkansas in 1836. And Kentucky succeeded, in 1792, to the ancient right and possession of Virginia, which extended, by virtue of these treaties, to the middle of the bed of the Mississippi River. It follows, therefore, that if Wolf Island, in 1763, or in 1820, or at any intermediate period between these dates, was east of this line, the jurisdiction of Kentucky rightfully attached to it. If the river has subsequently turned its course, and now runs east of the island, the status of the parties to this controversy is not altered by it,

for the channel which the river abandoned remains, as before, the boundary between the States and the island does not, in consequence of this action of the water, change its owner."

This doctrine we consider too well established to need further discussion, especially when we remember that each State is a distinct and separate sovereign, limited only by powers granted to the Federal Government. And this court has consistently held that where a navigable stream forms the boundary between States, the rule of accretion or imperceptible addition applies the same as between private parties, and the boundary remains the thread of the stream, but is not changed by a sudden change of channel, which leaves land on one side which was formerly on the other.

In Nebraska *v.* Iowa, 143 U. S. 359, the court says, pages 360 and 361:

"It is settled law, that when grants of land border on running water, and the banks are changed by that gradual process known as accretion, the riparian owner's boundary line still remains the stream, although, during the years, by this accretion, the actual area of his possessions may vary. In New Orleans *v.* United States, 10 Pet. 662, 717, this court said: 'The question is well settled at common law, that the person whose land is bounded by a stream of water which changes its course gradually by alluvial formations, shall still hold by the same boundary, including the accumulated soil. No other rule can be applied on just principles. Every proprietor whose land is thus bounded is subject to loss by the same means which may add to his territory; and, as he is without remedy for his loss in this way, he cannot be held accountable for his gain.' (See also Jones *v.*

Soulard, 24 How. 41; Banks *v.* Ogden, 2 Wall. 57; Saulet *v.* Shepherd, 4 Wall. 502; St. Clair County *v.* Livingston, 23 Wall. 46; Jefferis *v.* East Omaha Land Co., 134 U. S. 178.)

"It is equally well settled, that where a stream, which is a boundary, from any cause suddenly abandons its old and seeks a new bed, such change of channel works no change of boundary, and that the boundary remains as it was, in the center of the old channel, although no water may be flowing therein. This sudden and rapid change of channel is termed, in the law, avulsion. In Gould on Waters, Sec. 159, it is said: 'But if the change is violent and visible, and arises from a known cause, such as a freshet, or a cut through which a new channel is formed, the original thread of the stream continues to mark the limits of the two estates.' 2 Bl. Com. 262; Angell on Water Courses, Sec. 60; Trustees of Hopkins' Academy *v.* Dickinson, 9 Cush. 544; Buttenuth *v.* St. Louis Bridge Co., 123 Ill. 535; Hagan *v.* Campbell, 8 Porter (Ala.) 9; Murry *v.* Sermon, 1 Hawks (N. C.) 56.

"These propositions, which are universally recognized as correct where the boundaries of private property touch on streams, are in like manner recognized where the boundaries between States or Nations are, by prescription or treaty, found in running water. Accretion, no matter to which side it adds ground, leaves the boundary still the center of the channel."

And on page 367 that "The result of these authorities puts it beyond doubt that accretion would leave the boundary between two States the varying center of the channel, and that avulsion would establish a fixed boundary, to-wit: the center of the abandoned channel."

In that case it was contended that the rule was not applicable to land which bordered on the Missouri River, because of the peculiar character of that stream and of the soil through which it flows, the course of the river being tortuous, the current rapid, and the soil a soft sandy loam, not protected from the action of the water either by rocks or the roots of trees, but the court said, page 367:

> "But it has been held by this court that the general law of accretion is applicable to land on the Mississippi, and that being so, although the changes on the Missouri River are greater and more rapid than on the Mississippi, the difference does not constitute such a difference in principle as to render inapplicable to the Missouri River the general rule of law."

In the case at bar, the testimony shows that the Columbia River is a silt-bearing stream for about three months, and the rest of the year comparatively clear, and that accretions are gradual and imperceptible.

Therefore, we assume that the court will hold the rule to apply to land bordering on that portion of the Columbia River, constituting the boundary line in question.

The doctrine of the Nebraska-Iowa case is approved in Shively *v.* Bowlby, 152 U. S. 36; 14 Sup. Ct. 561.

And the same doctrine is supported by the following authorities:

Bishop's New Criminal Law, Sec. 150.

Coulthard *v.* Stevens, 35 American State Reports 304, and note 307.

Opinions of Attorney-General (U. S.), Vol. 8, p. 175.

Hagan *v.* Campbell, 33 Am. Dec. 267, and note 276.

Mulry *v.* Norton, 100 N. Y. 424, 429; 53 Am. Rep. 206, and note 215.

The testimony in this case shows that the north channel between Sand Island and Cape Disappointment has partially shoaled up, but considerable water still runs through it, even at low tide; that the Washington shore is practically the same as when the two States were admitted into the Union; that the shoaling of the channel has been by accretion to the north side of said island, extending the same towards the Washington shore. Therefore, that State can claim nothing on the ground of accretion, and said island having been within the jurisdiction of Oregon, as we have heretofore shown, when Oregon was admitted as a State, any accretion to the island would belong to the island and be in the jurisdiction of the State of Oregon.

We submit that an island within the jurisdiction of a sovereign State at the time of its admission does not leave the jurisdiction of that State by the action of the waters making imperceptible additions thereto, and on no other ground can Washington claim jurisdiction over Sand Island.

In Missouri *v.* Kentucky, 11 Wallace (U. S.) 395, the court says, at page 401:

> "The boundaries of Missouri, when she was admitted into the Union as a State in 1820, were fixed on this basis, as were those of Arkansas in 1836. And Kentucky succeeded, in 1792, to the ancient right and possession of Virginia, which extended, by virtue of these treaties, to the middle of the bed of the Mississippi River. It follows, therefore, that if Wolf Island, in 1763, or in 1820, or at any intermediate period between these dates, was east of this line, the jurisdiction of Kentucky rightfully attached to it. If the river has subsequently turned its course, and now runs east of the island, the status of the parties to the controversy is not altered by it, for the

channel which the river abandoned remains, as before, the boundary between the States and the island does not, in consequence of this action of the water, change its owner."

The Supreme Court of Missouri, in Benson *v.* Morrow *et al.*, 61 Mo. 345, held that alluvion belongs to the land to which it is formed. The court discusses the matter, at page 353, as follows:

"If the alluvion in question was formed to a nameless island, lying above island 55, which ultimately before suit extended down to and connected itself with island 55, neither the alluvion or the nameless island belonged to the owner of island 55. This unnumbered island belonged to the United States; but suppose it had been sold to a private citizen, and the alluvion formed at its lower end ultimately extended to island No. 55, would the owner of island 55 become the owner not only of the alluvion, but of the nameless island itself? It makes no difference in the application of the principle, whether the nameless and unsurveyed island belonged to the United States or to some individual citizen.

"Suppose the channel of the river between an island and the mainland is left dry by the water and entirely filled up with deposits of mud, and the island and mainland are at last one continuous tract of land, could the owner of either claim the entire tract? Certainly the newly formed land would belong to the United States, or it would be divided between the opposite owners, upon the common law principle, applicable to non-navigable streams, of each going to the thread of the channel, as it was as before it was deserted by the water. In the event supposed, the

river might be regarded as ceasing to be a navigable one, *pro hac vice*, or rather as being converted, at the slough between the island and the shore, into a non-navigable one. In any event the owner of the shore could not claim both the alluvion and the island, nor, *vice versa*, could the owner of the island claim the tract on the bank, with its accessions by alluvion."

There is no claim that Oregon has ever consented to any change in her boundary along the line in controversy or ceded jurisdiction over any of her islands except the cession of Sand Island for military purposes in 1864, as hereinbefore shown, and the evidence fails to show any material changes by accretions. There has been some change in the course vessels have taken. Up to about 1882 or 1883, ships would enter or leave the river on either side of Sand Island, according to prevailing winds or the side of the river they loaded. Also the testimony shows that the north channel has been shoaling up since 1882, and now no deep-sea-going vessels can enter or leave the river north of Sand Island. Further, it is plainly shown that the custom house is and ever since its first establishment has been at Astoria, and that ships entering or leaving the river by either channel must sail over to the south shore at Astoria for clearance paper; that if bound for Portland after having called at the custom house, they would run along the south shore until somewhere near Tongue Point and then run across to the middle channel near Yellow Bluffs, and continue on up stream along the Oregon shore, until past Three Tree Point. Also that prior to 1882, a part of the time, ships leaving Astoria for Portland would sometimes go through Woody Island channel from Tongue Point, coming into the middle channel again near Jim Crow Point, but that route was used but very little and was wholly abandoned prior to the admission of Washington; that

che channel from west of Tongue Point to Yellow Bluffs was buoyed out in 1881 or 1882, and has been continuously used ever since that date by all ocean-going vessels.

The testimony shows that during all this period the north channel existed and still exists, except as to the shoaling north of Sand Island along the Washington shore to Baker's Bay, connecting with the middle channel, near Point Ellice, and that ships used the south channel from Astoria to near Tongue Point, in order to pass the custom house at Astoria; that the north channel has, and never had, but one or two shoal places in it, and could have been kept open far better than other channels with much less dredging than has been done in the other channels.

While the testimony is all printed in the abstract of record in this case, to which we invite attention, we reprint some of it relating to the foregoing points:

Captain *H. B. Kindred*, witness on behalf of Oregon, testified: In 1863 there was a channel on the north side and one on the south side of Sand Island; that the one on the north side was the principal channel, and was considered the best, and deepest draft. (Record, p. 225.)

Captain *P. Ferchen* (record, page 228), on behalf of defendant, testified that in 1855 and 1856 there were two channels over the bar, called the north and south channels, and in answer to the question, "You may state through which channel the shipping mainly entered the river," answered:

"Well, as I said before, there was no choice; it was just owing to the wind and tides. We had to have certain winds. For instance, in a strong northeast wind, the south channel was used. In summer, more particularly the north channel was used. The northwest wind was such that you could not sail in without making a tack with the vessel, because the channel was in such form that it was south, all south."

Mr. Fulton: "In a northwest wind you would come in at the north channel?"

Witness: "The north channel; yes sir."

Captain *M. D. Staples* testified, on behalf of defendant: Occupation, pilot; been on the river most of the time since 1867; that when he first entered upon the occupation of pilot, they would take vessels in the north channel around Cape Disappointment into Baker's Bay; they called that the north channel; they would go on the north side of Sand Island, and that the north channel is a good channel from there up to Knappton.

Witness Staples also testified (record, page 240):

"Q. Was there a south channel of the Columbia River as well?

"A. Yes sir, but we didn't use it much; there wasn't much water there then.

"Q. But there was a south channel?

"A. Yes sir, there was a south channel, but there wasn't much water in it. The north channel was the best for our ships. There was more water. When we had a deep-draught ship we would take them into Baker's Bay and leave them there.

"Q. After you got inside the bar, was there a south channel or a channel on the Oregon side?

"A. Yes sir.

"Q. Then there were two distinct channels—the south channel and the north channel in the Columbia River?

"A. Yes sir. But the principal channel those days was the north channel.

"Q. Now with reference to Desdemona Sands or the one that is marked here 'bare at low water,' (on Oregon's Exhibit No. 4 [Plate III herein]) being the tract that is immediately off the point marked 'Tansy Point,' where

did the vessels go at that time—north or south of that—in coming to Astoria?

"A. They would go south of Desdemona Sands.

"Q. That is when you would come across?

"A. Yes.

"Q. But if they were going on up the river to Knappton, following that channel, which way would they go?

"A. Oh, they would go right in across them rocks marked 'Point Ellice.'

"Q. That would be away to the north of Desdemona Sands?

"A. Oh, yes sir. Right close into them rocks they would have to go. Fourteen or fifteen fathoms of water right in there now.

"Q. The rocks to which you refer are at the point marked 'Point Ellice?'

"A. Fourteen or fifteen fathoms of water right in to the rocks; always has been, too."

On cross-examination (page 241) the witness testified:

"Q. And is it not a fact that the vessels that come up and follow this course from Chinook Point to Point Ellice and on to Knappton, go there for the purpose of getting this lumber which is being manufactured at that point?

"A. Yes sir.

"Q. And they go no farther than Knappton, do they? They load there and then go right out to sea?

"A. They load there, yes sir.

"Q. And no vessels which are coming from the open sea take this northerly route up past Chinook Point and past Point Ellice and Knappton, and then go north?

"A. No sir, but they have done it, because they load vessels there and take them straight on up to Portland.

And vessels from Portland come that way too—there used to be years ago."

Again on page 248:

"Q. Now, Captain Staples, the reason you would bring the vessels up this way, up this course that you have indicated to Astoria, was primarily because all vessels that come in from the ocean, or practically, all con . to Astoria in the first instance, do they not?

"A. Yes sir.

"Q. Had there been a port on the opposite side from Astoria, could not all vessels, covering the time you have testified, have gone to that port with equal facility, as far as water is concerned?

"A. Yes, better; there would have been more water.

"Q. To a point opposite Astoria?

"A. Yes sir. They would have had more water. There is more water off Point Ellice than there is anywhere else. There are fifteen fathoms of water off Point Ellice.

"Q. And a good deep channel from the entrance of the river right up to that point?

"A. Yes sir.

"Q. During all the time that you have testified?

"A. Yes sir, plenty of it.

"Q. Now, the channel above Astoria which the ships follow at the present time and did follow during the period to which your testimony relates, has been kept open very largely by dredging, has it not?

"A. Altogether, yes sir.

"Q. Could not the shoal places that occur in what is known as the north channel following up the Washington shore have been kept open and thereby furnish equally as good a channel, by dredging?

"A. Yes sir, I should think it could.

"Q. And does not the use of the channel by steamboats and steam vessels tend to churn up the sand and keep the channel open?

"A. Yes sir.

"Q. A channel that is not used is more liable to shoal than one that is constantly in use.

"A. Yes sir. The steamers stir it up."

By Mr. MacDonald:

"Q. Is it necessary for all steamers and vessels passing on to Portland to stop at Astoria?

"A. Yes sir.

"Q. Why?

"A. Because it is the customs house.

"Q. Is that true of all steamers and vessels coming, say, from San Francisco?

"A. Yes sir.

"Q. Everything has to stop at Astoria?

"A. Everything has to stop at Astoria, yes sir, because it is the customs house.

"Q. How was it with those vessels you speak of, that went up to Knappton and then on to Portland?

"A. They came from Knappton to Astoria.

"Q. And got their clearance papers there?

"A. Yes sir.

"Q. Is it necessary for steamers which leave Portland destined for San Francisco to stop at Astoria?

"A. Yes sir.

"Q. Why?

"A. On account of the customs house.

"Q. Is there not a customs house at Portland?

"A. But they have to stop here just the same.

"Q. Do they get a clearance at Portland and also one at Astoria?

"A. Yes sir; in and out.

"Q. In and out?

"A. Yes sir.

"Q. Is the north channel passing Chinook Point, Point Ellice, Knappton and continuing on up on the north bank of the river as good a channel as the one south past Astoria?

"A. It is better water than it is up this way.

"Q. Up to Knappton you think it is better.

"A. Yes sir.

"Q. How is it from Knappton on, following the line of the Washington shore?

"A. I couldn't say about that."

Captain *Fisher*: Sixty years old; used to be captain on the river from 1865 to 1891. In early days came in the north channel, to the north of Sand Island. Was good water in the north channel up to Point Ellice, and was plenty of water for any of the vessels crossing the bar. From Point Ellice up to Knappton was plenty of water, and from there up about two miles it was good water and then it shoaled up to about twelve and fourteen feet at low tide—a little narrow place. That shoal might have been one-half of a mile wide, and crossing that there was plenty of water again up to Harrington Point, and there you got into the main channel of the river and plenty of water from there on up. The only obstruction to that north channel was this shoal where there would be twelve or fourteen feet of water at low tide, and which was probably a quarter of a mile wide and might have been one-half of a mile wide.

"Q. Now, that is the north channel?

"A. Yes, the north channel.

"Q. Now, take the south channel. Or was there a south channel also?

"A. The south channel is the channel coming by Astoria, and then there was a middle channel.

"Q. Describe the middle channel.

"A. The middle channel would come up north of Desdemona Sands and come out by Tongue Point. There was a shoal place in that a little below Astoria.

"Q. About where did the middle channel start? If a vessel were going to follow the middle channel, where would it enter in coming from the sea?

"A. The way it run then, it would go up from Cape Disappointment southeast towards Astoria.

"Q. Going north of the Desdemona Sands?

"A. Going north of Desdemona Sands.

"Q. There was a shoal in that, you say?

"A. Yes sir.

"Q. Up near Tongue Point?

"A. No, abreast of Astoria.

"Q. How wide was that shoal and how much water was there on it?

"A. I guess a mile or a mile and a half long. There was about ten feet of water, as I remember, at low tide.

"Q. What is the rise of the tide?

"A. It is six feet on the average.

"Q. Then getting over the shoal place, that middle channel would lead in to what?

"A. The main channel about Tongue Point. Get 100 feet of water about Tongue Point.

"Q. Now take the south channel. You say it is the channel that came in along by Astoria from the sea?

"A. Yes sir.

"Q. How was it in 1865, along there, as to the depth of water in it?

"A. There was plenty of water until you got up to Tongue Point; and then it has changed there several times since then.

"Q. But I am speaking of about how it was then.

"A. It was shoal up above or what is called the Hog's Back.

"Q. What was the depth of water at low water?

"A. I don't remember, but a sailing vessel at that time, that class of vessel that came, drawing about eighteen feet, would have to wait for high water to come across the Hog's Back.

"Q. How was that Hog's Back and shoal place removed?

"A. They have built a jetty since and have been dredging.

"Q. I will call your attention to Oregon's Exhibit No. 7, and ask you to indicate about where the Hog's Back was with reference to Tongue Point.

"A. The Hog's Back was right in here (pointing.)

"Q. About at the place marked with the word 'Woody' followed by 'Island Channel' just off the little island below Snag Island, as marked on the map?

"A. Yes sir. In those times a ship channel was on the south side of Snag Island, and a few years afterwards it changed on the north side of Snag Island—around this way (pointing on map.)

"Q. Then, the ships do not go up by way of the Woody Island channel at the present time, do they?

"A. No sir, they go right over towards Harrington's Point now.

"Q. They sail from Tongue Point across to Harring-

ton Point and what is marked on this map as Yellow Bluffs?

"A. Yes sir.

"Q. Now you say that the shoal place, called the Hog's Back, has been removed by the construction of the jetty and by dredging?

"A. Yes sir.

"Q. Is that jetty indicated on the map?

"A. No.

"Q. I call your attention to the jetty running across Snag Island. Doesn't that line indicate a jetty?

"A. I think it does.

"Q. How has this channel been secured across from Tongue Point to Yellow Bluffs?

"A. It cut through itself first, and then I think they have been dredging it some since.

"Q. Cut through after the construction of this jetty?

"A. I think it has, yes sir.

"Q. Has it not been made navigable by dredging?

"A. Yes sir, I think it has.

"Q. There was an indication of an increased depth there?

"A. Yes sir, they dredge in here off of Tongue Point every year.

"Q. There was an indication of the deepening of the water there after the construction of this jetty, but in order to make it navigable they had to dredge it, didn't they?

"A. Yes sir.

"Q. Now compare the north channel with the south channel; assuming the narrow shoal place to which you have referred as carrying twelve or fourteen feet of water

at low tide, to be removed by dredging, which would be the better, deeper channel—the north or the south channel?

"A. I think the north channel would be the safer, straighter.

"Q. And generally deeper?

"A. Yes sir, deep water up to Knappton.

"Q. Hasn't the channel leading down to Astoria been kept open because Astoria was the chief commercial city on the lower Columbia?

"A. Yes sir."

State Engineer *Lewis*, on behalf of defendant, gives a full statement of how he arrived at the starting point of the line as claimed by Oregon, printed abstract of record, page 271 to page 282, and also as to how he fixed the line from the starting point to Three Tree Point, on page 271, as follows:

"Q. Mr. Lewis, you may state whether you established the point which is stated to be 'one marine league at sea, due west' of the mouth of the ship channel of the Columbia River on the plat contained in the answer and cross-complaint. This is the point to which I refer (pointing to map.)

"A. I have shown upon the map the point that you have described.

"Q. State whether you established that point and placed it on the map contained in the answer.

"A. The point as established is shown on this map."

Mr. Macdonald: "Has that been introduced into evidence or marked for identification?"

Mr. Crawford: "But I refer to the map in the answer."

Mr. MacDonald: "All right."

"Q. The question I am asking you now is whether you fixed that point or not, as it is printed on the map?

"A. Well, it is fixed as shown there.

"Q. Well, I say, did you place that on the map and print it?

"A. Yes sir.

"Q. Now you may explain how you arrived at the exact point.

"A. The boundary line (referring to map) follows up the coast to a point due west and opposite the middle of the north ship channel of the Columbia River; thence easterly to and up the middle channel of said river, and where it is divided by islands, up the middle of the widest channel thereof, etc. The point which you have mentioned is fixed in the middle of the north ship channel as shown by the contours representing level lines on the bottom of the mouth of the Columbia River, and it is half way between the contours as shown.

"Q. Contours of what?

"A. The contours representing on this map level lines on the bottom of the river; and the deepest point would be a point in the center or midway between these contours.

"Q. You may state how you arrived at the point, that exact spot, as to its position between Point Adams and Cape Disappointment.

"A. Upon the map which you have mentioned two channels are shown in the mouth of the Columbia River, one going north of Sand Island—

"Q. Explain by reference to Oregon's Exhibit No. 4 (Plate III herein.)

"A. The mouth of the Columbia River is somewhere between the points as shown upon this map, Oregon's Exhibit No. 4 (Plate III), as Fort Stevens and Cape Hancock, and between these points two channels are

shown. The north channel is shown by the open space between the two lines made up of three dots representing eighteen feet in depth of water; the space between these lines is deeper water, shown at different places by the figures representing fathoms, such as ten and one-third; thence easterly and midway between these lines which I have described, passing south of Chinook Point and Point Ellice midway between these lines; and just east of Point Ellice, we find a division in the channel is shown upon this map; one of the channels running close to the Washington shore, the other channel running some distance from the Washington shore. Both are apparently of the same depth. The shallowest deptn I note on this division, as shown on this map, is three and three-fourths fathoms, near the east edge of the map.

"Q. You may explain whether there is any other channel, as shown by Oregon's Exhibit No. 4 (Pate III), between the two channels you have just explained and the south channel.

"A. Between the two channels I have just mentioned and the south channel, as it passes near Astoria, there is no other channel shown upon this map which could be identified as a channel.

"Q. You may state whether it was possible, in 1851, according to this map, to have sailed a vessel of ordinary depth from Point Ellice to Tongue Point in anything like a direct course?

"A. As shown by this map (Plate III), we see a dark spot just south of Point Ellice marked 'Bare at low water;' then northeasterly we see the depths marked two and one-half, five and three-fourths, four and one-half, until we come to the first line which represents six feet in depth or one fathom. Beyond that we find eight, ten and one-half and seven, respectively, which shows that a ship drawing ten and one-half feet of water could have crossed between the points you have mentioned.

"Q. Now you may state what is the comparative depth of the middle channel to which you have referred and the south channel—stating from the map.

"A. The middle channel to which I have referred and the south channel passing near Astoria are both deeper than three fathoms or eighteen feet.

"Q. You may explain Oregon's Exhibit No. 7, as to when it shows the hydrography to have been made, the soundings, and then as to its connection with Oregon's Exhibit No. 6—up river.

"A. The hydrography or soundings shown upon Oregon's Exhibit No. 7 were made in 1867 and 1868. That upon Oregon's Exhibit No. 6, as shown by a notation, was made in 1868, and 1869, but the title gives the date published at Washington, D. C., March, 1905. I also note a second notation: 'Hydrography of entrance from survey by the Corps of Engineers, U. S. A., November 1904.' The deep channel which passes close to Point Ellice, as shown upon Oregon's Exhibit No. 6, continues almost east to near the edge of this map, where a depth of twenty-six feet is noticed. A similar channel showing a depth of three and three-fourths fathoms is found on Oregon's Exhibit No. 7, at which appears to be a continuation of this channel. This channel then gradually shoals in places to twelve feet in depth, coming to deeper water a little south of the Portuguese Point, where three and one-fourth fathoms are noticed; thence following the deep or open space which represents deep water, we find a shoal between this channel and the channel south of Yellow Bluffs. The shallowest water between these two portions of deep water, as shown upon Oregon's Exhibit No. 7—that is, the lowest water which it would be possible to find between these two deep portions of the river, is found to be eleven feet.

"Q. You may state whether there are any later maps than these two prior to the admission of Oregon into

the Union of States and prior to the establishment of the northern boundary of the State by the Enabling Act?

"A. These two maps which you refer to are Oregon's Exhibits No. 6 and No. 7. They were made subsequent to the admission of the State of Oregon into the Union, I believe.

"Q. You may state whether they were the earliest maps after the admission of the State into the Union.

"A. No, they were not. I believe an exhibit has been made showing the river, dated 1870.

"Q. Well, 1868 is prior to 1870.

"A. The exhibit I have referred to apparently has not been put in but the hydrography upon these maps is but a little later than 1870.

"Q. You may state whether the map which I now show you with the statement thereon: 'U. S. Coast Survey, Benjamin Pierce, Superintendent, sheet No. 1, 1870,' is the chart or map to which you have just referred as being made in 1870.

"A. Yes sir, this is the map to which I have referred.

"Q. And do I understand you to say that that map is compiled from the last surveys of the mouth of the river prior to 1870 and after the admission of the State into the Union, as a member of the Union?

"A. This is a map representing the mouth of the Columbia River which bears the earliest date after the admission of the State that I have seen."

Mr. Crawford: "We offer this map in evidence and ask that it be marked Oregon's Exhibit No. 9."

The map was so marked.

Mr. MacDonald: "The State of Washington has no objection to the introduction of this map."

"Q. Now you may state whether Oregon's Exhibit No. 4, and Oregon's Exhibit No. 5, are the latest maps show-

ing the mouth of the Columbia River, the latter showing the mouth of the Columbia and the former showing the mouth and up as far as Tongue Point, made prior to the admission of the State of Oregon as a member of the Union.

"A. In a letter addressed to the Superintendent of the U. S. Coast and Geodetic Survey, requesting that the latest maps prior to the admission of the State of Oregon be furnished me, I received these two maps with the information that they were, as represented to be, the latest maps before the admission.

"Q. You have not explained fully what I asked you when first called to the stand, and that was how you arrived at the point directly opposite the mouth of the north channel of the Columbia River for a starting point of the north boundary, which the description in the Enabling Act is one marine league at sea. Please state how you arrive at that point?

"A. Upon one of the government publications I found a note describing what is taken to be the mouth of the Columbia River."

Mr. MacDonald: "I wish you would identify that publication."

Witness: "I do not find the note that I remember to have seen, but on Oregon's Exhibit No. 6 I find lines dividing the high seas from the inland waters relating to rules of the road from Cape Disappointment light to Point Adams' old contour. So this is, apparently, the mouth of the Columbia River and the beginning of the high seas (pointing on map.) Therefore I have taken the latest map prior to the admission of the State of Oregon as being the map which I assumed the commission, or who ever drew up the description of the boundary line, to have had before them, and placing a point in the middle of the north ship channel upon this line which I have described between Cape Disappointment and Point Adams, this

point being in the middle of the deepest water, as shown by the contour lines, and which is probably the point which you refer to.

"Q. Then, the commencement of the north boundary, according to your explanation, is one marine league due west of that point?

"A. Yes sir.

"Q. If I understand you correctly, then, the point in the mouth of the north channel of the Columbia River is a point in the center of said channel and on a tangent drawn from the most southern point of Cape Disappointment to the most northern point of Point Adams?

"A. On a line drawn between these points, yes sir."

The testimony of Captain *Caruthers* is to the same effect as the testimony of the other old pilots before mentioned. He says, however, that about 1882, deep sea vessels stopped using the north channel. That it commenced to shoal up about that time. (Abstract of Record, 283.)

Also Captain *C. S. Gunderson* to same effect, except that the north ship channel was used for ships north of Sand Island until up to 1886. (Abstract of Record, 288 to 293.)

Captain *George Warren Wood* testifies that he is sixty-two years of age, twenty-five years a Columbia River bar pilot; a lieutenant in the Coast Survey seven years, including 1867 and 1868; assisted in making the hydrographic survey of the bar at the mouth of the Columbia River and part of the river during those years. His testimony, in part, is (Record, 315 to 319):

"Q. In what year was the earliest survey you made?

"A. 1867 and 1868; that is the hydrographic survey.

"Q. I call your attention to Oregon's Exhibit 9, and ask you to state whether or not that is a map made pursuant to the survey you say you assisted in making.

"A. Yes, that is the map.

"Q. At the time you made that survey, where was the north channel of the Columbia River, with reference to Sand Island?

"A. It went on the north side of Sand Island, between Sand Island and Cape Disappointment.

"Q. How would ships enter the mouth of the Columbia River in order to sail through and up the north channel at that time?

"A. (Pointing on map) They would enter on the course something north of east and then haul up straight for the Cape. The channel was crooked. You came in steering to the eastward and then hauled up to the northward more, around into Baker's Bay.

"Q. And you would run close, you say—

"A. Close to Cape Disappointment, a very short distance; just half way between the Cape and the east end. You could take a ship through there and she would have plenty of room. The soundings were bold right up and down,—deep water.

"Q. What was the course at that time in bringing your vessel in, passing Cape Disappointment? Would you round the Cape?

"A. You could round the Cape and come into Baker's Bay and anchor, or you could keep on and go around Sand Island out here to Astoria.

"Q. I would like to have you describe as nearly as you can, the course of a vessel coming in the north channel by Cape Disappointment and north of Sand Island at that time, in such language as can be entered in the record, so as to identify the course.

"A. You know the compasses on a vessel change; there are local attractions and you can't depend on a compass. You must have ranges of shore that you can

steer by; you must have land-marks to verify the compass courses. Now, one mark particularly that we have coming in here was after we hauled up to the Cape and had passed the Cape going up towards Sand Island.

"Q. Would that be still on a northerly course or an easterly course then?

"A. The northerly course would come up to Cape Disappointment, and then as a stern range you always keep the Disappointment lighthouse tangent to the east side of the Cape coming up this way. It cleared the spit that they called Sulphur Spit here, and kept it clear of Chinook Spit over there. That range defined the northern limit of Sand Island water that you could cross to deep water. You couldn't come south of that line.

"Q. I will ask you to indicate in a general way by marking in red ink the course of a vessel at that period entering the north channel from the ocean, rounding the Cape and Sand Island that you have described (referring to Oregon's Exhibit No. 9.) Such a course would leave Sand Island to the south of the track of the vessel?

"A. Yes sir.

"Q. How many channels at the mouth of the river were there in 1868?

"A. Two.

"Q. By what names were they known?

"A. North and south channels?

"Q. What was the general course of the north channel after getting inside of the river?

"A. Well, they came together at the head of Sand Island. After you came out around the head of Sand Island you would join the south channel. The north and south channels came together.

"Q. They came together?

"A. Yes.

"Q. Then, from there on, what channels were there?

"A. There were three channels then.

"Q. There were three channels?

"A. Yes sir.

"Q. Now just describe each of those three channels, beginning first with the north channel.

"A. The north channel went around by Chinook Point and around Point Ellice, up to Cementville—they called it then—now Knappton.

"Q. Did these three channels proceed out of what we will call the junction of the north and south channels at the head of Sand Island from the ocean?

"A. From the ocean, yes.

"Q. Proceed.

"A. Then there was a channel that went from Point Ellice to Tongue Point—the middle channel.

"Q. Describe that middle channel fully. Describe it first on sheet 1, Oregon's Exhibit No. 9, to the easterly end of that exhibit."

The witness points on the map.

"Q. Mark on Oregon's Exhibit No. 9 in red ink the middle channel from its initial point to the end of that exhibit."

The witness marked as requested, and said: "These come together here."

"Q. Have you marked them so it is shown how they go?

"A. Yes.

"Q. Trace the south channel as well."

The witness does as requested.

Senator Fulton: "The witness has traced on the Plat, Oregon's Exhibit No. 9, in red ink, certain lines leading out from what he has described to be the conjunction of

the north and south channel entering from the ocean at the head of Sand Island, one line leading up along the Washington shore. What does that indicate?"

Witness: "That is the north channel abreast of Point Ellice."

"Q. I will ask you to mark the north channel."

The witness marks as requested, in red ink.

"Q. Branching from the channel you have described and designated as the north channel just south of Point Ellice, you have indicated a channel extending—

"A. The general direction of it would be towards Tongue Point.

"Q. What is that line to indicate?

"A. It indicates water there that could be used, of course,—a channel.

"Q. Will you designate that as a branch of the north channel?

"A. As a branch of the north channel, yes sir. It was used by small boats going across there back and forth."

Senator Fulton: "I will ask that that be marked the branch of the north channel. Let the record show that the witness so marks it in red ink."

"Q. Opening out from the junction of the north and south channels entering from the ocean, at the head of Sand Island, or a short distance easterly therefrom, is another line indicated by you in red ink, to which I now call your attention, and ask you what channel of the river that indicates?

"A. We call that the middle channel.

"Q. I will ask you to mark that in red ink 'Middle Channel.'"

The witness marks as requested.

"Q. Now, I will call your attention to Oregon's Exhibit

No. 7, and ask you if that is a continuation up the river of Oregon's Exhibit No. 9?

"A. Yes sir, this is a continuation.

"Q. Will you kindly indicate by red lines the continuation of the channels you have marked on Oregon's Exhibit No. 9?

"A. They all come together here abreast of Astoria,—right here (pointing to map.) Here is Tongue Point. From Tongue Point to Point Ellice practically this channel comes in here. This middle channel comes up here and the south channel comes up in here. They all focus right here.

"Q. I understand, then, from your statement that the channel marked on Oregon's Exhibit No. 9 as 'Branch of North Channel' and the channel marked 'Middle Channel' form a junction or come together in one channel at a point slightly west of Tongue Point. I ask you to mark on Oregon's Exhibit No. 9 an 'X' in red ink, the point of junction of the branch of the north channel and the middle channel."

The witness marks as requested.

"Q. From what point I will ask you to indicate, by drawing a red line, the continuation of the channel formed by the junction of these two as it was at that time."

Witness marks as requested.

"Q. Now, you have marked a channel following the words 'Woody Island Channel' and also the channel marked 'Cordell Channel.' I will ask you if there was a channel also leading from a point near Yellow Bluffs down to opposite Tongue Point?

"A. There had been a channel there formerly, but it had been closed up; at that time it was not used.

"Q. What was the cause of the closing up of that channel?

"A. The wreck of a vessel. A brig was wrecked in there some place; I could not indicate exactly where it was.

"Q. Indicate the general course of that channel which you say had formerly been used but was closed from the channel north of Tongue Point.

"A. Somewhere in this vicinity (indicating on map.)

"Q. I ask you to identify that channel by marking it 'Continuation of middle channel.'"

Witness marks as requested.

"Q. Now, you have indicated on Oregon's Exhibit 9 the north channel to a point east of Knappton. I ask you to continue that channel, or, rather, continue a line on Oregon's Exhibit No. 7, indicating that channel up to Yellow Bluffs or up in the vicinity of Yellow Bluffs."

Witness marks as requested.

"Q. I wish you would now look at Oregon's Exhibit No. 9, and indicate by a line in red ink thereon the south channel at the entrance of the Columbia River up to the point where you say the two channels form a junction."

Witness marks as requested.

"Q. Again calling your attention to Oregon Exhibit 7, and the line you have marked there as a continuation of the north channel, I ask you to indicate it by the words 'North channel' in red ink."

Witness marks as requested.

"Q. Now, from the point where the middle channel and the north channel form a junction near Yellow Bluffs to Three Tree Point, do they continue as one channel and did they at that time?

"A. They come together at Woody Island and then continue as one channel to Three Tree Point.

"Q. They come together between Woody Island and Jim Crow Point?

"A. Yes sir, that is where they come together.

"Q. What channels do you say come together there?

"A. The Woody Island channel, the Cordell channel and the north channel.

"Q. But the question I asked you is where this channel marked 'Continuation of Middle Channel' joins the north channel at a point near Yellow Bluffs and southerly therefrom. Do those two channels now and did they then continue as one channel from there on to Three Tree Point?

"A. Yes sir.

"Q. At the time this survey of 1868 was made, do you know whether or not the north channel and that portion thereof from its junction with the middle channel at Yellow Bluffs westerly to Knappton, was being used as a channel of commerce?

"A. Yes sir.

"Q. Just describe what you know about that.

"A. It was used by the vessels of the Simpson Lumber Company. They loaded a general cargo and came to Portland.

"Q. Loaded where?

"A. They loaded in San Francisco and brought their freight up to Portland; and then going down the river, instead of taking that Woody Island channel, they would take the north channel along the north bank and go to Knappton to load lumber and go from there out to sea. They would follow the north shore and come down here and go to Knappton.

"Q. By which I understand you to mean, as you have indicated on the map, that the vessels would come down the north channel to the point of junction between the continuation of the middle channel and the north channel, as marked by you on the map?

"A. Yes sir."

Witness Wood states that in 1868 the first island up the river after passing Sand Island, was Snag Island, then Woody Island (page 324 of record), and that in referring to island he means land, a portion of which is bare at high tide, and that the islands are still substantially as they were in 1868. At page 341, that the channel from Tongue Point to Yellow Bluffs was used before dredging. He also testifies (record, page 344) that what he designates as the middle channel is what is and has been during past years commonly known as "Middle channel" by seafaring men and was so known in 1868.

The other witnesses for the State of Oregon tend to corroborate Captain Wood's statements, as also does a great portion of the testimony introduced on behalf of the State of Washington.

Oregon also introduced the record, showing deeds executed by the State for lands in the Columbia River between Three Tree Point and the ocean, as tending to show that the State has exercised jurisdiction over the lands in dispute for many years, and Mr. *H. G. VanDusen*, Master Fish Warden of Oregon, testified as to having issued fishing licenses for nearly or quite all of said islands and sands.

We submit that from all the testimony offered by both parties to this controversy, which, however, is too voluminous for reproduction here, but to which we respectfully call the court's attention, and of which the foregoing excerpts are fair samples, that the following facts are fairly established:

I. That when Oregon was admitted into the Union of States, the north ship channel of the Columbia River at its mouth was north of Sand Island, and was the same channel referred to in the act admitting Washington in 1889.

II. That the mouth of the river is where the waters cease to be confined between banks and cross a line

drawn from the points on Cape Disappointment and Point Adams nearest to each other.

III. That the commencement of the line as contemplated by Congress and the representatives of the two States, was one marine league due west from the middle of said north channel, where it crosses said line between the capes.

IV. That the course from the starting point was to the middle of the mouth of said north channel, then up the same to the middle channel, etc.

V. That Sand Island has changed its shape and nearly all of its location, by erosion on the south and accretions on the north side thereof; that the Washington shore north of said island has not advanced southerly by accretions or otherwise. All witnesses substantially agree that the changes in said island have so occurred and the same conclusion is reached by an examination of the various charts introduced in evidence. The testimony of Oregon's State Engineer, Mr. Lewis, is to that effect also, and that a small portion of the island, as shown by lines representing the island at low water, has never changed its location since the admission of Oregon, and he shows this by comparing all of the United States surveys of the mouth of the river since that date, and demonstrates it by mathematical calculations and measurements from such charts, and it also appears from Oregon's Exhibit No. 16, a plat compiled under the supervision of S. W. Roessler, Lieut.-Colonel, Corps of Engineers, U. S. A., stationed at Portland, Oregon, from the original charts and records in his office, and duly certified by him to be correct. (See Plate I herein.)

VI. That the middle channel at the time of the admission of Oregon to the sisterhood of States, formed or commenced at a point a little south and east of Point Ellice on the Washington shore, and thence easterly to Three

Tree Point, and was at that time, and ever since has been, and is the main ship channel between those points.

VII. That prior to the re-opening of the channel between Tongue Point and Yellow Bluffs, in 1882, it would be open and used at times, and at other times shoal up and vessels go through Woody Island and Cordell channels, and presumably usually north of Snag Island, as the lowest depth north of the island, as shown by Washington's Exhibit "L," being sheet No. 2, U. S. Coast Survey of the Columbia River, edition 1875, hydrography 1867-1868, topography 1868, 1870 and 1871, is seventeen feet, while south it is fifteen feet, and we submit, without quoting therefrom, but inviting inspection thereof, that the testimony introduced by both parties to this suit shows beyond question that since the early eighties the main ship channel has been continuous from Tongue Point to Yellow Bluffs, thence to Three Tree Point. (See testimony of G. F. Parker, record, pages 400 *et seq.*, and testimony of John Service, pages 405, 406 and 407, as to use, width and depth of Woody Island channel, and Captain A. L. Pease, page 416; H. Emken, page 420; Captain J. W. Babbidge, pages 727 and 728; J. W. Welch, pages 438-39 and 40; George Kaboth, pages 444 and 448; W. H. Whitcome, page 458; J. W. Patterson, page 463.)

VIII. That since the admission of Washington, the channel has been continuous as above stated.

IX. That the jetty being constructed at the mouth of the Columbia River was commenced in 1885, and that since its commencement the erosion on the south side of Sand Island and accretion on the north side thereof has been much more rapid, increasing in proportion to the amount of rock placed in the water on the south side of the river.

Having reached the middle channel of the river the statute defining the boundary line reads: "Up the middle

channel of said river, and where it is divided by islands up the middle of the widest channel thereof." Not the deepest channel nor the main ship channel, but the widest channel. Referring to the maps of the date in existence when Oregon and Washington were admitted as States, we find the first island after passing Sand Island at the mouth of the river to be Snag Island, about half way between Harrington Point and Jim Crow Point, shown on Oregon's Exhibits Nos. 8 and 14, and just north of where Cordell channel unites with Woody Island channel. A glance at the maps shows that at this point the widest channel is and always has been between Snag Island and the Washington shore, and that without reference to the depth of the water. The widest deep water is north of the island and it is one expanse of water from the island to the Washington shore, and since 1882, all ocean-going ships pass a long distance north of the island, and prior thereto most of them passed north, a few of the lighter draught going south for a year or two. Therefore, the boundary line at this point must be in a channel north of this island, and strengthens Oregon's position as hereinbefore outlined.

Oregon's Exhibit 14 shows the relative distances from Snag Island to the U. S. meander lines on the Washington shore and the U. S. meander lines on the Oregon shore, and shows the Washington shore to be several times farther than the Oregon shore. It is not reasonable to suppose that Oregon's representatives would have consented to the designation of a boundary line which would have left the islands along her shores under the jurisdiction of another State, and when they examined the map of 1851 and saw that there was no middle channel until Point Ellice was reached, the language used in the boundary was considered sufficiently definite, and when we take that chart, Oregon's Exhibit No. 4 (Plate III herein) and examine it closely and remember that Congress must have secured its information relative to the river there-

from, it is easy to determine where the line was intended to be fixed. In the navigation of the Columbia River up to about 1883, it must be remembered, as the testimony fully establishes, that no large vessels were used, even those making trips to San Francisco, or other points in the coast trade, but were of sufficiently light draught to pass through any channel which would lead to their destination.

Another circumstance strengthens Oregon's position, that the boundary was never considered by either Washington or Oregon to be elsewhere than north of Snag Island, and that is that Snag Island was sold by the State of Oregon to J. W. & V. Cook by deed dated December 10, 1877, which deed is set forth in the abstract of record herein at pages 351 and 352, and Oregon has since its admission as a State exercised jurisdiction over the same, while Washington has never given a deed or lease thereof to any person whomsoever, nor levied taxes thereon, nor in any way attempted to exercise jurisdiction over the same, and when Washington was admitted (1889), all ships of every kind passed along the Washington shore from Yellow Bluffs easterly towards Portland, regardless of how they reached Yellow Bluffs, and could not possibly have passed through Woody Island or Cordell channels, and said channels were closed to sea-going vessels long prior to that time.

Also, these facts being before Washington's representatives and Congress at the date of the admission of Washington, it must have been taken into consideration by them when fixing the south boundary of the State of Washington, between the points in controversy in this suit. If it were not so, the consent of Oregon would have been obtained to make the change. When all the facts and circumstances are considered, and the language used in defining the boundary between the two States is construed in the light cast thereon by such facts and circumstances, the construction of the attorneys for the State

of Washington that the boundary line between the two States in the vicinity of Snag Island was ever claimed or thought to be south of the island, even by the Washington authorities, must be held to be wholly unsupported by testimony, and not within the purview of the act defining the boundary, nor so intended by Congress or Washington's representatives at the date of admission.

By the same evidence, Oregon's claim as to the location of the boundary line from Yellow Bluffs east to Three Tree Point is established, and this controversy as to all sands and islands between those points disposed of in Oregon's favor, all being south of said line, the principal of which are Jim Crow Sands, Miller's Sands, Johnson's Sands and Ryan Sands, all of which Oregon has exercised jurisdiction over by making sales thereof and issuing fishing licenses therefor, as shown by the testimony of Oregon's Master Fish Warden, H. G. VanDusen, and clerk of State Land Board, G. G. Brown. Abstract of record, pages 348 to 367, inclusive, and Oregon's Exhibit No. 8, showing sands sold by Oregon. The name is not attached to each of the sands, but the location easily fixes their identity. Helgerson's Sands are also named in the complaint as being a portion of the sands in controversy, but no one seemed to know where they were located, and the attorneys for the State of Washington could not inform us, but Master Fish Warden VanDusen located them during his examination as a witness as Fishertown Sands, located a little southwest of Three Tree Point and south of the boundary line as claimed by complainant in the bill of complaint and, therefore, admitted to be in the jurisdiction of Oregon. He says, on page 362 of record, in answer to the question:

"Q. What did you learn about Helgerson's Sands during the intermission?

"A. The Helgerson Sands are the Fishertown Sands."

His answer was never controverted nor questioned and an examination of Exhibit A, attached to the bill of complaint, shows Fishertown Sands to be located southeasterly from Three Tree Point, and south of the line claimed by Washington. We will, therefore, presume that Helgerson's Sands or Fishertown Sands, by which ever name they may be called, are within the jurisdiction of the State of Oregon.

If our position is correct as to the location of the boundary line between Yellow Bluffs and Three Tree Point, and we believe that it is, and if our contention is sound also as to the commencement at the west end of the boundary involved in this suit, that it enters the river at the middle of the mouth of the north ship channel and continues along the middle of said channel to and up the middle channel, etc., as shown upon Oregon's Exhibit No. 4 (Plate III herein), then the line continues along the middle of the north ship channel as shown on said exhibit No. 4, until a middle channel is found. As we have heretofore demonstrated, no middle channel is found, as known to exist in 1859, until we reach Point Ellice, where it branches off from the north channel and continues on up the river easterly, while the north channel continues along the Washington shore to Baker's Bay. These propositions are plainly deducible from the physical conditions existing in 1859, and in the main still existing except as changed by artificial means. The changes of the channel around Sand Island are largely due to the construction of the jetty at the south side of the mouth of the river. All witnesses agree that the north channel was used by deep-sea vessels as late as 1882 or 1883, while one witness testifies it was so used north of Sand Island until 1886, but not since that date. Considerable work was done on the jetty in 1885 and 1886, and after that the north channel shoaled rapidly. To show the changes in the north ship channel and that while it would shoal up occasionally and then deepen again until the commencement of the jetty

at the mouth of the river in 1886, we quote from the report of the Board of Engineers for the permanent improvement of the mouth of the Columbia River, of date October 13, 1882, printed in the record, page 19, *et. seq.* We quote from page 23:

> "In 1841 there were channels giving thirty feet of water on the north and twenty-seven feet south of Sand Island. As Sand Island moved north, the northern channel was gradually closed, so that now but thirteen feet can be carried around its northern side. In 1839 and 1841 these channels joined west of Sand Island, thus giving a single main channel thence to the sea, with twenty-seven feet of water. But in 1852 the minor channel shown in the survey of 1839, crossing Clatsop Spit, which extended five and one-half miles west from Point Adams, had become a wide southerly channel, three miles west from Clatsop Beach, with twenty-one feet of water, there still being twenty-seven feet in the sea end of the main or north channel. The part of Clatsop Spit thus cut off formed the Middle Sands, which in 1850 had already become continuous with the Sand Island shoals, so that from the east of Sand Island two channels ran to the sea, separated by a shoal facing west-northwest, and six miles long.
>
> "The chart of 1868 shows that the south channel had become the main channel, having twenty-five feet of water, while the north channel had but twenty-one at the sea end. The south channel continued to be the main channel for but a few years, and in 1876, the date of the next survey, the north channel was the main one, having twenty-two feet, while the south one had but twenty and one-half."

The foregoing shows the north channel to have been the deepest and main ship channel as late as 1876—seventeen years after Oregon was admitted and thirteen prior to the admission of Washington, and but nine years prior to the commencement of the jetty. Therefore, it can hardly be held that the north ship channel would ever have shoaled to any great extent, and remained shallow, except as a result of the construction of the jetty. There is no question, therefore, that at the time of the admission of each State, Congress had in mind the north ship channel as running north of Sand Island.

We wish also in this connection to call attention to the fact that while the act admitting Oregon and the act admitting Washington begin the boundary between the two States in the "north ship channel," in neither act does the word "ship" again occur, and the line runs from the starting point to and up the middle channel, and where there are islands, up the widest channel. If Congress had intended that the main ship channel should be followed, appropriate language would have been used, and using the language "where there are islands, up the widest channel," we deem conclusive that the ship channel or the main ship channel was not intended, but that the widest channel, regardless of whether it was the deepest or the one generally used.

In addition to the testimony heretofore referred to in this brief relating to the initial point of the boundary at the western end of the line, we wish to call attention to the testimony of Mr. *G. B. Hegardt*, a civil engineer, called as a witness on the part of complainant, and who for some years was connected with the government service at or near the mouth of the Columbia River. He testifies on cross examination, in part, as follows (Abstract of record, page 114):

"Q. You have described on Washington's Exhibit H the initial point for the north [south] boundary of the

State of Washington as being the point where the dotted red line marked 'One Marine League at Sea' is intercepted by the black line marked 'Channel 1905.' You reached that point, I understand, by assuming that the mouth of the north ship channel of the Columbia River is at the point where this dotted line is intersected by a range line to Coxcomb Hill. These lines intersect near the point of intersection of each with the red line marked 'North Channel Line 1854,' do they not?

"A. Yes sir.

"Q. If the mouth of the river is not correctly located by you, but, on the contrary, should be located where the waters of the river pass beyond the line between the most southerly point of Cape Disappointment and the most northerly point of Point Adams, then where would be the initial point of the north boundary?

"A. I could not reach any such interpretation of any channel entrance.

"Q. I understand; but I say suppose you were mistaken and as a matter of fact the mouth of the river is where the waters pass the line I have described, then where would be the initial point?

"A. I don't have to admit it is a fact or anything else?

"Q. Oh, no, you are not admitting it is the fact. I am simply stating that as a hypothesis upon which to base the question.

"A. Then it would be between the headland of Cape Disappointment and the northerly point of Sulphur Spit.

"Q. Practically where located by Mr. Lewis, the engineer who testified to having located the blue line as indicated on Washington's Exhibit H, and marked 'Boundary Line claimed by the State of Oregon'?

"A. Yes sir."

Also, further fortifying our position that in 1859 there was no middle channel west of Point Ellice, we call atten-

tion to a portion of Mr. Hegardt's testimony, found at page 103 of the abstract of record, as follows:

"Q. With reference to the middle channel in the Columbia River, I will ask you as of what date that middle channel has been put upon any government map which is introduced in evidence?

"A. The first chart on which the middle channel is shown is the survey of 1868, and I think it gives the depth of water. (Referring to Oregon's Exhibit No. 9.) At the lower end of and about north of Desdamona Sands, there is a channel in which the depth of water at least depth is three and three-fourths fathoms, and this depth is maintained and increased for a considerable distance until a point is reached due north of Smith's Point, Astoria, where the least depth shown is three and one-fourth fathoms, when it again enters into deep water west and north of Tongue Point, thus making a continuous channel

"Q. The ruling depth of that channel, then, is three and one-fourth fathoms?

"A. Yes sir, of that date.

"Q. Now, I will ask you to take the map next preceding Oregon's Exhibit No. 9, and next in point of time, which I believe is Oregon's Exhibit No. 5, and ask you to give the depths in the same place as the middle channel appears on Oregon's Exhibit No. 9.

"A. The survey shown on Oregon's Exhibit No. 5 did not extend up that far.

"Q. Then there is no means of determining?

"A. No sir, except by the 1851 survey.

"Q. Will you turn to the 1851 survey and tell us what that shows?

"A. There is no channel on the map which would indicate middle channel.

"Q. What is there? Are there sands?

"A. There is a large area of sands shown as 'Bare at low water.'

"Q. Bare at low water?

"A. Yes.

"Q. Those sands appear in Oregon's Exhibit No. 4, in the same place as the main channel appears in Oregon's Exhibit No. 9?

"A. Part of the sands, the north part of them.

"Q. Now, I wish you would state how long that middle channel continued.

"A. It exists at the present day."

It would seem that, as to Desdemona Sands, complainant is condemned by the words which fall from the mouth of his own witnesses. If there was no middle channel shown on any chart prior to 1868, near Desdemona Sands or Sand Island, and the 1854 chart does not extend up river as far as Point Ellice, then the chart of 1851, plainly showing a middle channel commencing near Point Ellice and extending easterly as far as the chart shows the river up stream, must have been the chart which was consulted for information relative to the middle channel when the line was established. It is also reasonable to presume that when the middle of the north channel was reached, the line would remain therein for some little distance at least, and until some point should be reached where it would be equitable to make a change therefrom, and that point in the mind of Congress was where the middle channel, shown on the charts of that day, branched off from the north channel, and continued up stream as far as such charts show the river. That was near Point Ellice and is such a plain, deep, well-defined channel that, taken with all the existing conditions and surrounding circumstances at the time, no doubt can exist as to where the line in controversy was intended

to be and was established. Washington contends it was established and should follow the south channel along the Oregon shore, but we fail to find any intimation even that the line should ever enter the south channel. The north channel and the middle channel are the only channels referred to in establishing the boundary between the two States, and we submit that had it been the intention of Congress to use the south channel as a part of the boundary, at any point, it would have said so. When Washington was admitted, the use by Congress, in defining the boundary between the two States, of exactly the same language, with the exception of saying opposite the middle of the *mouth* of the north ship channel, instead of opposite middle of the north ship channel, indicates strongly that no change was intended to be made, but that it must remain in the same place located prior to that date. If we are correct in the foregoing propositions, the north boundary line runs north of all of the disputed sands and leaves them within the jurisdiction of Oregon.

Washington can claim nothing from the doctrine of accretion. While Baker's Bay has to some extent shoaled, there is no testimony tending to show that the shore line in the vicinity of Cape Disappointment, nor any at any point northerly from Sand Island, has received imperceptible or other additions which would advance the shore line southerly and consequently tend to crowd the north channel southerly. Encroachment upon that channel since 1885 has been wholly from the south. Substantially all accretion has been to Sand Island, which island we submit cannot be classed as a floating island or as shifting sands. While the plats and testimony show considerable changes to have occurred prior to 1859, since that date the change has been gradual and mostly from artificial causes, as hereinbefore shown.

We submit that the testimony clearly establishes the fact that since about 1868 Sand Island has not wholly

moved or changed. An examination of Oregon's Exhibit 16 shows that a small portion of the north shore of the island as it existed in 1868, shown by lines representing Sand Island at low water, forms a portion of the south side of the island as it exists at the present time, or at least as it existed at the latest survey had prior to the taking of the testimony, to-wit: the survey of 1905. Mr. Hegardt admits in his testimony, abstract of record, page 112:

"Q. You may state whether there is not a portion of the southern side of Sand Island as it exists at the present time, which was a portion of the northern side of Sand Island as it existed in 1881 and 1882.

"A. Yes sir, I believe so.

"Q. You may state whether there is not a portion of the southern side of Sand Island as it exists today, which was a portion of the northern side of Sand Island as it existed in 1889.

"A. Yes sir, there is."

And on page 141 Mr. Hegardt acknowledges a portion of the island containing the wreck of a ship called the "Republic" to have remained stationary since 1879. His testimony as to that is as follows:

"Q. You recall the wreck of the 'Republic,' do you not?

"A. I was not here at that time.

"Q. Well, perhaps you know from common knowledge the year in which she was wrecked?

"A. I heard it testified to here several times."

It was admitted that the 'Republic' was wrecked in 1879.

"Q. You have seen the wreck of the 'Republic' have you not?

"A. Yes, I have seen it a number of times.

"Q. Still standing there?

"A. Yes.

"Q. Where does that stand with reference to Sand Island today? What part of the island is it?

"A. It is on the most southerly point of Sand Island.

"Q. The timbers of that are still exposed at low tide, are they not?

"A. They were within very recent years.

"Q. The last time you had occasion to notice.

"A. Yes, I know that the fishermen would not fish there, in that vicinity, in the last few years, because the fishing tackle would get caught in the wreck of the 'Republic.' "

We submit that the foregoing proves that Sand Island has not wholly changed its position since 1868, and utterly discredits complainant's theory that it is a floating island or shifting sands. It contains at the present some large buildings, and has had buildings thereon for a long time, the testimony not disclosing the length of time, but without doubt long prior to the admission of Washington as a State. Imperceptible accretion, therefore, to the north side of the island would belong to the owner of the island and be in the jurisdiction of Oregon. By such accretion to Sand Island the line doubtless has been crowded over nearer to the Washington shore, but Oregon can lose nothing thereby. A portion of the old north channel still remains, having a considerable width and varying in depth from four feet at the lowest points to a considerable depth in other places, and small boats at high tide still pass in and out through the same at pleasure. We are unable to understand upon what principle of law the fact that it is not now used by deep sea-going ships can be held to change the line.

The existence of a channel passing around to the north of Sand Island in 1905 was admitted by Mr. Hegardt, wit-

ness for the State of Washington, transcript of record, page 199, as follows:

"Q. Now, is it not a fact that the United States Army Engineers have made a recent survey of the channel to the north of Sand Island and at present maintain a system of signals marking this channel, beyond the line of which no fishing traps are permitted to encroach towards the island?

"A. I know of no recent survey, except that I made a preliminary examination of it about a year and a half ago, which showed decided shoaling from previous surveys.

"Q. Yes, but these signals still remain, do they not?

"A. They were not signals.

"Q. What were they?

"A. They were simply beacons to define the line beyond which fish traps could not be extended in the channel.

"Q. Now, what vessels at the present time are in the habit of traveling the channel north of Sand Island, going to Ilwaco and Portland?

"A. I think the steamer T. J. Potter.

"Q. The steamer T. J. Potter is a boat drawing how much water?

"A. I should not think she draws over seven or eight feet.

"Q. She draws about eight feet?

"A. Yes.

"Q. How much of a ris d fall is there to the tide?

"A. Seven and one-half feet.

"Q. So at high water what would be the mean average depth of the north channel north of Sand Island?

"A. You mean at the upper end of Sand Island or the lower end?

"Q. The upper end.

"A. There would be three feet at low water and about ten feet at high water."

The lines defining this channel to the north of Sand Island, and beyond which fish traps are not allowed to approach, and the beacons outlining such channel, as described by the above testimony, are shown on the accompanying plate. This plate was prepared from a tracing of official government records, which is certified to by S. W. Roessler, Lieut.-Colonel, Corps of Engineers, U. S. A., as a true and correct copy of the official records of a survey of Sand Island and Baker Bay, showing the location of high and low water lines, range beacons of the channel and concrete monuments on Sand Island, dated October, 1904. (See Plate II herein.)

Between Chinook Point and Point Adams on Oregon's Exhibits No. 5, No. 6, No. 9, and all other maps introduced in evidence in this case showing this portion of the river, only two deep and well-defined channels are shown, the north channel at all times and to this day being the deepest and the widest channel to a point beyond Point Ellice and almost due north of the city of Astoria. No word is found in either of the acts of Congress describing the boundary line for Oregon or for Washington which could be construed in any way to permit the boundary line between the two States at the present day to enter and be located in the south channel of the Columbia River; nor, if it is decided that the present boundary line passes north of Sand Island, could the language used then authorize such line to cross the well-defined north channel into the south channel of the Columbia River, passing near Point Adams. When there is no proof, either by existing maps or in the oral testimony, as to the existence of more than two channels in the Columbia River between Point

Adams and Chinook Point, then the boundary line between the two States must lie at some point between the points marked "Desdemona Sands Light" and "Chinook Point" on Washington's Exhibit H, and presumably in the center of such channel.

There is nothing in the testimony to warrant a claim that the line is in the south channel, as claimed by complainant. The respective acts of Congress in the admission of the two States place it in the north and middle channels of the Columbia River, and both of them leave nearly all the disputed territory south of the line. Coming in at the north channel and continuing therein until the middle channel is reached, as shown on Oregon's Exhibit 4 (Plate III herein), leaves all the disputed territory south of the line, and we believe such is the true location of the line. If, however, it should be held that after a middle channel, also referred to in the testimony as Tongue Point Chute, cut through just north of Desdemona Sands in 1868, joining the south channel at or near Tongue Point, and then running towards Yellow Bluffs on the Washington shore, as is testified to by Mr. Hegardt, which as to a channel north of Desdemona Sands is corroborated by Wood and others as cutting through about 1868 or 1870, and is also corroborated by an examination of the charts of that date, then Desdemona Sands is still south of the boundary, being south of the middle channel, so called by some witnesses, but would leave Harrington Sands just north of Tongue Point, north of the line, as well as some other sands in that section of the river, which are now claimed to be Oregon territory and over which it has for many years exercised jurisdiction. However, we are unable to understand upon what testimony or by what subtle logic the able counsel for the complainant can claim that the middle channel referred to by Congress in 1859 in the act admitting Oregon into the Union of States, is the channel north of Desdemona Sands, which did not exist until 1868 or 1870.

At this point we respectfully invite your attention to Oregon's Exhibit No. 6, Sheet No. 1, of the Columbia River, published in 1905, which clearly shows a well-defined channel extending close along the Washington shore from Point Ellice to Knappton, with a depth of water at mean low tide of seventy-four feet opposite Point Ellice, shoaling to eighteen feet at Knappton, and extending to the edge of the exhibit with a depth of nineteen feet, doubtless continuing to deep water beyond. Opposite Point Ellice there is a division in the north channel, the widest and deepest channel extending almost due east from Point Ellice to the edge of the map, where the shallowest depth, twenty-three feet, is printed. Considering only these two channels, bounded by the three-dot or eighteen-foot contour lines, the channel conditions are seen to be almost identical with those shown on Oregon's Exhibit No. 4 (Plate III herein), the latest map prior to the admission of Oregon. That branch of the north channel extending east from Point Ellice on Oregon's Exhibit No. 4 is the only channel that could have been considered as the middle channel prior to the admission of Oregon as a State, and the same, or if anything a better channel, still exists in that portion of the river, as shown on Oregon Exhibit No. 7, the latest map. It has also been demonstrated, and is clearly shown on Oregon's Exhibit No. 7, which is the map of latest hydrography for this portion of the river, that the aforesaid middle channel, as shown on Oregon's Exhibit No. 6, continues on up the river to deep water just beyond Yellow Bluffs on Oregon's Exhibit No. 7, with a ruling depth of eleven feet at low water.

Referring again to Oregon's Exhibit No. 6, we find almost the same conditions as to depth of water between Point Ellice and Tongue Point as is shown on Oregon's Exhibit No. 4 (Plate III herein); and, further, that Oregon's Exhibit No. 6 does not clearly show any other or more prominent channel than that as heretofore de-

scribed as the middle channel, which could from this map more properly be called the middle channel, as intended by the act of Congress describing the boundary line of the State of Oregon.

The existence of a channel along what has been claimed by Oregon as the middle channel is recognized in the report of Major W. C. Langfitt, Captain of the Corps of Engineers, U. S. Army, in his report "Survey of the Lower Willamette and Columbia Rivers below Portland, Oregon, with a view to obtaining a channel depth of twenty-five feet at low water from Portland to the Mouth of the Columbia River," dated Portland, Oregon, April 12, 1900. He states, page 45, transcript of record:

> "The second proposal is to create a channel down the north shore from Three Tree Point to Harrington Point, thence to deep water leading down to Point Ellice. * * * In the early years after the discovery of the river there used to be a fair channel following the second course outlined above, the Coast Survey chart of 1851 showing twenty-one feet carried through to deep water at Point Gray, and the Vancouver map of 1792 shows this carried through past Harrington Point, and the chart of 1839 shows a good channel along the south shore to Tongue Point."

Mr. *G. B. Hegardt*, witness for the complainant, testifies in reply to a question, transcript of record, page 99:

"Q. Has any dredging ever been done along the channel following the Washington shore on Washington's Exhibit H?

"A. No sir, I never heard of any, not since I came down.

"Q. A witness testified upon the stand the other day that it would require more dredging to keep the south

channel open and available for navigation than would be necessary to maintain the north channel.

"A. It would take more in the south."

The reasons for keeping open and maintaining the south channel passing Astoria, at a greater expense for dredging, has been clearly brought out in the testimony, to be on account of the commercial importance of Astoria and the location of the customs house at this point. This conclusion is further strengthened by the report of Thomas B. Hanbury, Major, Corps of Engineers, U. S. Army, Portland, Oregon, September 8, 1891, transcript of record, page 36, line 4, where he says: "It would be practicable to force this water to continue down the north shore and improve the depth of water on that side, should the necessities of commerce warrant the expense."

We have presented the facts relative to the disputed boundary as, in our view, are fully established by the testimony, and submit that Congress never intended the line to enter the south channel at any point, and did intend it to follow the north channel until the middle channel should be reached, which all the charts show to have been near Point Ellice, and this being the case, the boundary was established nearly as claimed by Oregon in its answer herein, and nothing has since occurred to lawfully change the same.

Wherefore, we pray a decree in accordance with our answer and cross complaint.

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